

The MASP 2008 represents a unique and valuable asset management tool for MDOT staff involved in state airport system planning and airport capital development. It documents the planning process that identifies the aviation role of public-use airports in Michigan through the year 2030. MASP 2008 is the culmination of a coordinated review and modification of MASP 2000, a plan that has provided MDOT with a valuable programming tool for the development of the system of public-use airports in Michigan.

As with MASP 2000, the MASP 2008 presents the results of a system planning process that has been aligned with the goals and objectives of MDOT's State Long Range Plan (MI Transportation Plan). The MASP 2008 supports programming decisions and is useful in evaluating programming actions related to airport system and airport facility deficiencies.

A diverse group of individuals was assembled into a MASP 2008 Steering Committee that provided valuable input and direction over the course of the study. This broad-based group included representatives from both within and outside the aviation community.

Michigan currently has 235 public-use airports. Omitted from the MASP 2008 are private-use airfields, heliports, seaplane bases, hospital helistops, and military facilities, although joint-use public/military facilities are included in the system plan. Of the 235 public-use airports, 129 (55 percent) are publicly owned and 106 (45 percent) are privately held. Although both types of facilities are open to the public, there are some important considerations, due to type of ownership, when considering long term viability of the public transportation asset. Publicly owned airports tend to continue functioning as airports over the long haul with a sense of stability that is important to users of the airport. They are also more readily accepted as a community asset. Privately owned airports are far more likely to drift into and out of public use and, consequently, are less reliable as long-term transportation resources. Privately owned airports are often under extreme pressure from developers and others for conversion into non-aviation uses, such as housing or commercial development. Once it is converted to another use, the likelihood of restoring the airport to its former use is remote, at best.

A severe strain on the aviation industry as it relates to current economic trends has caused the Federal Aviation Administration (FAA) to modify its forecasting procedures since MASP 2000. For the period 2008-2025, the FAA projects 22 percent growth nationwide in total airport operations and 1.3 percent average annual growth. In the Great Lakes region, the FAA projects 18 percent total growth and 1.1 percent average annual growth. Similar to operations forecasts, the FAA's based aircraft projections show minor growth for the period 2008-2025. The FAA projects 16 percent total growth nationwide in based aircraft and 0.9 percent average annual growth. In the Great Lakes region, the FAA projects 13 percent total growth and 0.8 percent average annual growth.

Among the key functions of the MASP 2008 is, from a state perspective, identifying those airports that can best respond to state goals and objectives. To that end, a series of system goals were identified as an outcome of an issue identification process related to MI Transportation Plan. System goals identified were:

- ❖ Airports should serve significant population centers
- ❖ Airports should serve significant business centers
- ❖ Airports should serve significant tourism/convention centers
- ❖ Airports should provide access to the general population
- ❖ Airports should provide adequate land area coverage
- ❖ Airports should provide adequate regional capacity, and
- ❖ Airports should serve seasonally isolated areas.

In turn, all airports, following a rigorous analytical process, were assigned to one of three tiers based on their contribution to the system goals. Tier 1 airports respond to essential/critical state airport system goals. These airports should be developed to their full and appropriate level. Tier 2 airports complement the essential/critical state airport system and/or respond to local community needs. Focus at these airports should be on maintaining infrastructure with a lesser emphasis on facility expansion. Tier 3 airports duplicate services provided by other airports and/or respond to specific needs of individuals and/or small business.

Table 1 summarizes the system standards and indicates the number of airports included in Tier 1 or Tier 2 for each system goal. A number of airports respond to more than one system goal.

**Table 1**

Composite Alternative Summary					
System Goal	Apt Class	Service Area	Service Goal	Tier 1	Tier 2
Population Centers	C-II	30 min	95%	32	10
Business Centers	C-II	30 min	95%	36	14
Tourism Centers	B-II	30 min	95%	39	9
General Population Access	B-II	45 min	95%	28	4
Land Area Coverage	B-I	30 miles	95%	50	0
Regional Capacity	B-I	NA	125%	64	15
Isolation	B-I or Heliport	NA	100%	7	0
Overall				88	24

Source: MDOT Bureau of Aeronautics & Freight Services

In addition to establishing system goals, a series of facility goals were developed that identify the basic components of an airport. These facility goals are specific for each airport classification. Facility goals are:

- ❖ Primary Runway System
- ❖ Pavement Condition
- ❖ Lighting and Visual Aids
- ❖ Approach Protection
- ❖ Basic Pilot and Aircraft Services
- ❖ All-Weather Access
- ❖ Year-Round Access
- ❖ Landside Access

All airports were evaluated to determine whether they currently meet each facility standard and the extent and cost associated with responding to deficiencies through the year 2030. Table 2 identifies the number of Tier 1 airports meeting the facility standards:

**Table 2**

Number of Airports Meeting Facility Goal Standards							
Facility Goal	System Goal						
	Population Centers	Business Centers	Tourism Centers	General Population	Land Cover	Regional Capacity	Isolation
Number of Tier 1 Airports	32	36	39	28	50	64	7
Primary Runway System	84%	75%	77%	96%	94%	94%	57%
Pavement Condition	88%	83%	87%	93%	82%	86%	57%
Lighting and Visual Aids	78%	64%	79%	82%	80%	85%	43%
Approach Protection	100%	100%	100%	100%	100%	100%	100%
Basic Pilot & Aircraft Svs.	88%	89%	82%	89%	84%	88%	43%
All-Weather Access	91%	67%	92%	96%	84%	77%	43%
Year-Round Access	100%	100%	95%	100%	96%	100%	57%
Landside Access	97%	97%	95%	96%	86%	89%	57%

Source: MDOT Bureau of Aeronautics & Freight Services

Many of the goals included in the MASP 2008 are broad in scope, which makes it difficult to create or define metrics that can be used to measure or assess progress in attaining the goals. Likewise, it would be equally difficult to assess the funding necessary to fully and completely meet the goals described in this document. However, MI Transportation Plan includes an estimate of the funding necessary to meet the capital improvement needs of Michigan's airports through 2030, as requested by individual airport sponsors. Funding secured to meet all the capital needs required to keep Michigan's airports running safely and efficiently likely would ensure that virtually all the goals of this plan are met.

The goals described in this plan, coupled with the individual facility requests submitted to MDOT by airport sponsors, will culminate in an aviation investment strategy. This strategic plan, developed subsequent to the MASP 2008, will aid in determining project selection priorities.